

Benjamin Bengfort

Resume

73 Bryant St NW
Washington D.C. 20001
M (701) 680 3095
E benjamin@bengfort.com
W cs.umd.edu/~bengfort

Experience

- Partner**, District Data Labs, Washington, DC. **2014–present**
Architect and develop innovative open source projects, facilitating local developer contributions and research, including Yellowbrick, visual steering for machine learning, and Baleen, a large scale corpus ingestion engine.
- Faculty Director**, Georgetown University, Washington, DC. **2014–present**
Adjunct Faculty, Data Analytics Certificate Program (CCPE). Teaching *Foundations of Data Science*, *Software Engineering for Data*, *Data Sources*, *Data Analysis II: Machine Learning*, and *Applied Data Analytics*.
- Chief Data Scientist**, Cobrain Company, Bethesda, MD. **2013–2014**
Developed a Global Recommendation Engine, using Collaborative Filtering algorithms as well as Active Learning and adaptive systems from a machine-learning standpoint. Graph traversal and clustering across massive data stores required distributed Graph databases: Titan, as well as strong computation in Hadoop and Python with Pandas and NumPy.
- Chief Technology Officer**, Unbound Concepts, Baltimore, MD. **2011–2013**
Natural Language Processing across a large dataset of children's literature using NLTK Machine Learning and predictive analysis with clustering and multivariate linear regression Big data analysis applied to the NLP and ML using Hadoop and MapReduce techniques. Application development: Android, iOS, Django: Developed the BookLeveler app
- Lead Programmer**, Tactical Network Solutions, Columbia, MD. **2010–2012**
Python software development for embedded, mobile and server applications
Large-scale and real-time data analysis of Petabytes of wireless collects.
Real time asset tracking software development with geolocation and KML toolkits
- CMS Analyst**, Oxford University Press, Oxford, United Kingdom. **2007–2009**
Management of custom content management solutions for electronic publishing division
- Junior Network Engineer**, CenGen, Inc., Columbia, MD. **2003–2004**
Network support for DARPA's Grand Challenge & USMC Condor
Mobile and wireless integration, network vehicle integration

Education

- PhD Candidate**, University of Maryland, College Park. **2014–2017**
Graduate Research Assistant, Distributed Systems (expected December 2017)
- M.S. Computer Science**, North Dakota State University. **2008–2010**
Phi Kappa Phi, Upsilon Pi Epsilon
- B.A. Economics**, University of Maryland, College Park. **2004–2006**
Primatum Honor Society
- English Major**, United States Naval Academy. **2002–2003**

Skills

Software Development: Python 2.7 & 3.5, GoLang, JavaScript, Java, C/C++, Git & GitHub, Agile

Machine Learning: Scikit-Learn, TensorFlow, SparkML, GraphX

Application Development: Django, Nginx, AJAX, jQuery, Underscore, Bootstrap, Flask, REST microservices

Big Data: Spark, Hadoop, MapReduce, HDFS, Distributed Systems, Celery

NLP: NLTK, TextBlob, Pattern, spaCy, Gensim

Databases: PostgreSQL, MongoDB, BoltDB, Redis, Hive, Titan, Neo4j, MySQL, SQLite

Publications

Benjamin Bengfort. Data Product Architectures, December 2016.

Benjamin Bengfort. Dynamics in Graph Analysis: Adding Time as a Structure for Visual and Statistical Insight, September 2016.

Benjamin Bengfort. Natural Language Processing with NLTK and Gensim, May 2016.

Benjamin Bengfort. Visualizing the Model Selection Process, July 2016.

Benjamin Bengfort, Rebecca Bilbro, and Tony Ojeda. *Applied Text Analysis with Python: Enabling Language Aware Data Products with Machine Learning*. O'Reilly Media, Inc., August 2017.

Benjamin Bengfort and Michael T. Cox. Interactive Knowledge-Goal Reasoning. In *Goal Reasoning: Papers from the ACS Workshop*, page 10, 2015.

Benjamin Bengfort and Xiaojiang Du. Efficient resource allocation in Hybrid Wireless Networks. In *Wireless Communications and Networking Conference (WCNC), 2011 IEEE*, pages 820–825. IEEE, 2011.

Benjamin Bengfort and Jenny Kim. *Data Analytics with Hadoop: An Introduction for Data Scientists*. O'Reilly Media, Inc., May 2016.

Benjamin Bengfort, Philip Y. Kim, Kevin Harrison, and James A. Reggia. Evolutionary design of self-organizing particle systems for collective problem solving. In *Swarm Intelligence (SIS), 2014 IEEE Symposium on*, pages 1–8. IEEE, December 2014.

Benjamin Bengfort and Sean Patrick Murphy. Teaching the Elephant to Read: Hadoop, Python, and NLP, October 2013.

Tony Ojeda, Sean Patrick Murphy, Benjamin Bengfort, and Abhijit Dasgupta. *Practical Data Science Cookbook*. Packt Publishing Ltd, September 2014.

Volunteer Experience

- UMD Department of Computer Science: Education Committee
- Advances in Cognitive Systems 2015: Referee and Reviewer
- UMD Senate: Nominations Committee, Committee on Committees, Student Affairs Committee, Special Working Group on Senate Communications.
- Data Community DC: Treasurer, Board Member, and Organizer for DIDC.
- Vino Scholastico: Board member for HCC tuition fundraising event.